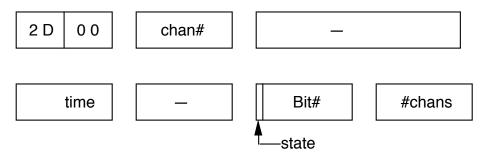
Capture Analog Readings

Data Access Table option Thu, Aug 17, 1995

This option is designed to capture all Linac data readings on a single 15 Hz pulse. One may specify an initial channel number, a number of channels, and an enabling Bit# and state. All analog channel readings in the range indicated are copied into the 8th word of the 8-word ADATA table entries. Listype #28 can be used to request this data using a CHAN ident. The data will remain available until the next time data needs to be captured.

The enabling Bit# might be the beam status bit, for example. This would capture all analog readings on every Linac beam pulse. To make it useful, a host would have to request all this data before the next Linac beam pulse. This would be very difficult to do at 15 Hz. A host program that needed to collect a subset of such data, however, might be able to do it.

RDATA entry format



The time word is a diagnostic *result* that shows the time required to execute this RDATA entry in 0.5 ms units. On a 133A board (68020), the time to do this copy for 1024 channels is 1.0–1.5 ms.

ADATA entry format

reading	setting	nominal	tolerance
alarm flags	alarm count	motor count	captured